

Listing of Claims:

1. (Currently Amended) A liquid crystal display device comprising:

(i) a liquid crystal element comprising:

a front substrate which is arranged at a front side of the liquid crystal element, which corresponds to a viewing screen side of the display device;

a back substrate which is arranged at a back side of said front substrate so as to be opposed to said front substrate;

at least one first electrode which is formed on an internal surface of said front substrate, which is opposed to an internal surface of said back substrate;

at least one thin film transistor which is arranged on the internal surface of said back substrate and driven by a drive signal;

at least one second electrode which: (i) comprises a transparent conductive film, (ii) is arranged on the internal surface of said back substrate so as to be opposed to said at least one first electrode, and (iii) is connected to said thin film transistor, thereby forming at least one pixel ~~in a region that does not overlap with a region where the thin film transistor is formed and that is included in an area where said at least one first electrode and said at least one second electrode are opposed to each other;~~

25 a liquid crystal layer, comprising liquid crystal
molecules, which is sandwiched between said front substrate and
said back substrate, said liquid crystal molecules being twist-
aligned by an angle in a range of 60° to 70°;

30 at least one reflective film, ~~which comprises a metal~~
~~film and~~ is positioned between said second electrode and the
internal surface of said back substrate ~~, such that an entire~~
~~surface of the reflective film is directly in surface contact~~
~~with a surface of said second electrode that faces the internal~~
~~surface of said back substrate, and so as to correspond to a part~~
of ~~said region in which~~ said at least one pixel, respectively, is
35 ~~formed that does not overlap with the region where the thin film~~
~~transistor is formed,~~ such that a reflective portion for
reflecting incident light and a transmissive portion, in a region
other than said reflective portion, for transmitting incident
light are formed in said at least one pixel;

40 a color filter which is provided on one of the internal
surface of the front substrate and the internal surface of the
back substrate so as to correspond to said at least one pixel,
and which has an opening formed by removing said color filter at
a position such that said opening corresponds to a part of said
45 reflective portion; ~~, which is in said region that does not~~
~~overlap the region where said thin film transistor is formed;~~ and

a liquid crystal layer thickness adjusting layer which is provided in at least a region corresponding to said reflective portion between said front substrate and said back substrate, in order to set a thickness of said liquid crystal layer in said reflective portion to be thinner than a thickness of said liquid crystal layer in said transmissive portion;

(ii) a front polarizing plate and a back polarizing plate which are arranged at the front side and a back side of said liquid crystal element, respectively;

(iii) a front retardation plate and a back retardation plate which are respectively arranged between said front polarizing plate and said liquid crystal layer and between said back polarizing plate and said liquid crystal layer such that slow axes thereof are orthogonal to each other, and which provide a retardation of 1/4 wavelength to light transmitted therethrough;
and

~~(iii)~~ (iv) a backlight which is arranged at a back of said back polarizing plate.

2. (Withdrawn) The liquid crystal display device according to claim 1, wherein a thickness of said liquid crystal layer thickness adjusting layer is set such that a thickness of said color filter in said reflective portion is thinner than a thickness of said color filter in said transmissive portion.

3. (Previously Presented) The liquid crystal display device according to claim 1, wherein a thickness of said liquid crystal layer thickness adjusting layer is set such that a thickness of said color filter in said reflective portion is equal to a
5 thickness of said color filter in said transmissive portion.

4. (Withdrawn) The liquid crystal display device according to claim 1, wherein a thickness of said liquid crystal layer thickness adjusting layer is set such that a thickness of said color filter in said reflective portion is thinner than a
5 thickness of said color filter in said transmissive portion.

5. (Withdrawn) The liquid crystal display device according to claim 4, further comprising a flattening film which is formed on said color filter in order to flatten a surface of said color filter, which has different thicknesses.

Claims 6 and 7 (Canceled).

8. (Previously Presented) The liquid crystal display device according to claim 1, wherein said liquid crystal layer thickness adjusting layer comprises a transparent insulation film.

Claim 9 (Canceled).

10. (Previously Presented) The liquid crystal display device according to claim 1, wherein said liquid crystal layer thickness adjusting layer fills said hole formed in said color filter.

11. (Previously Presented) The liquid crystal display device according to claim 1, wherein said liquid crystal layer thickness adjusting layer fills said hole formed in said color filter and covers said color filter.

12. (Withdrawn) The liquid crystal display device according to claim 1, wherein:

said liquid crystal layer thickness adjusting layer is formed on a surface of one of said front substrate and said back
5 substrate; and

said color filter is formed such that a part of said color filter covers said liquid crystal layer thickness adjusting layer.

13. (Previously Presented) The liquid crystal display device according to claim 1, wherein said reflective layer comprises a reflective surface on which depressions and protrusions are formed.

14. (Previously Presented) The liquid crystal display device according to claim 1, wherein:

a value of a product $\Delta n \cdot d_1$ of a thickness d_1 and a refractive index anisotropy Δn of said liquid crystal layer in said reflective portion is set to a value which makes said liquid crystal layer provide a retardation of $1/4$ wavelength to light transmitted therethrough in a non electric field state in which substantially no electric field is applied between the first and second electrodes opposed to each other; and

a value of a product $\Delta n \cdot d_2$ of a thickness d_2 and a refractive index anisotropy Δn of said liquid crystal layer in said transmissive portion is set to a value that makes said liquid crystal layer provide a retardation of $1/2$ wavelength to light transmitted therethrough in the non electric field state.

15. (Currently Amended) The liquid crystal display device according to claim 14, ~~further comprising a front retardation plate and a back retardation plate which are respectively arranged between said front polarizing plate and said liquid crystal layer and between said back polarizing plate and said liquid crystal layer such that slow axes thereof are orthogonal to each other, and which provide a retardation of $1/4$ wavelength to light transmitted therethrough;~~ wherein said front polarizing

plate and said back polarizing plate are arranged such that
10 the transmission axes thereof are orthogonal to each other; and
wherein said front retardation plate is arranged so as to
cancel the retardation provided to the light transmitted
therethrough by said liquid crystal layer in the non electric
field state.

16. (Previously Presented) The liquid crystal display
device according to claim 15, further comprising a scattering
reflective plate which is arranged between said front polarizing
plate and said liquid crystal layer and which scatters a portion
of light incident thereon.

17. (Currently Amended) A liquid crystal display device
comprising:

(i) a liquid crystal element comprising:

5 a front substrate which is arranged at a front side of
the liquid crystal element, which corresponds to a viewing screen
side of the display device;

a back substrate which is arranged at a back side of
said front substrate so as to be opposed to said front substrate;

10 at least one opposite electrode which is formed on an
internal surface of said front substrate;

a plurality of thin film transistors which are arranged on an internal surface of said back substrate and which are driven by a drive signal;

15 a plurality of pixel electrodes, each of which comprises a transparent conductive film, and which: (i) are arranged on the internal surface of said back substrate so as to be opposed to said at least one opposite electrode, and (ii) are connected to said thin film transistors, thereby forming a plurality of pixels in areas where said at least one opposite
20 electrode and said plurality of pixel electrodes are opposed to each other;

a liquid crystal layer, comprising liquid crystal molecules, which is sandwiched between said front substrate and said back substrate, said liquid crystal molecules being twist-
25 aligned by an angle in a range of 60° to 70°;

a plurality of reflective films, ~~each of which comprises a metal film,~~ which are positioned between the plurality of pixel electrodes and the internal surface of said back substrate ~~such that an entire surface of each of the~~
30 ~~plurality of reflective films is directly in surface contact with a corresponding one of the pixel electrodes at a surface of the pixel electrode that faces the internal surface of said back substrate, and such that the plurality of reflective films so as~~
to respectively correspond to parts of ~~regions, in which said~~

35 plurality of pixels, ~~are formed and which do not overlap with~~
~~regions where said thin film transistors are formed,~~ such that a
reflective portion for reflecting incident light and a
transmissive portion, in a region other than said reflective
portion, for transmitting incident light are formed in each of
40 said plurality of pixels;

a color filter which is provided on the internal
surface of said front substrate so as to correspond to said
plurality of pixels, and

liquid crystal layer thickness adjusting layers which
45 are provided in regions corresponding to at least said reflective
portions on said color filter, in order to set a thickness of
said liquid crystal layer in said reflective portions to be
thinner than a thickness of said liquid crystal layer in said
transmissive portions;

50 (ii) a front polarizing plate and a back polarizing plate
which are arranged at the front side and a back side of said
liquid crystal element, respectively;

(iii) a front retardation plate and a back retardation plate
which are respectively arranged between said front polarizing
55 plate and said liquid crystal layer and between said back
polarizing plate and said liquid crystal layer such that slow
axes thereof are orthogonal to each other, and which provide a

retardation of 1/4 wavelength to light transmitted therethrough;

and

60 ~~(iii)~~ (iv) a backlight which is arranged at a back of said
back polarizing plate.

18. (Previously Presented) The liquid crystal display
device according to claim 17, wherein:

thicknesses of said respective liquid crystal layer
thickness adjusting layers are set such that a thickness of said
5 color filter in said reflective portions is equal to a thickness
of said color filter in said transmissive portions;

said color filter has holes formed by removing parts of said
color filter at portions corresponding to said reflective
portions of said plurality of pixels; and

10 said liquid crystal layer thickness adjusting layers fill
said holes formed in said color filter and cover said color
filter.

Claims 19 and 20 (Canceled).